Sea Grant Coastal Resilience Projects

The funding listed here represents only the portion of the project focusing on resilience.

Full project information can be found using the title listed below in the Sea Grant Public Project Search found at http://seagrant.noaa.gov/WhatWeDo/Projects.

State AK	Sea Grant Program Alaska Sea Grant	Federal Funding	Match Funding	Project Titles
AK	Alaska Sea Grant	\$255,010	\$40,543	Developing Long-Term Records of Sea Level Fluctuations and Barrier Beach Evolution to Enhance Understanding of
				Ongoing and Future Coastal Change
				Capturing spatial behaviors of observed and unobserved fishing over time using vessel monitoring system data An expert and community supported decision tool for managing marine invasive species
				Resilience of estuarine groundfish communities to future changes in glacial effluent
				Monitoring Pinto Abalone and Kelp Forests in a changing climate
				Marine Advisory Program and Communications Graying of the Fleet in Alaska's Fisheries: Defining the Problem and Assessing Alternatives
CA	California and USC Sea Grant	\$833,836	\$383,183	Graying of the Fleet in Alaska's Fisheries. Defining the Floblem and Assessing Alternatives
	California Sea Grant	\$265,892	\$156,976	
-				Interactive effects of acidification and hypoxia and adaptive potential in red abalone Predatorprey dynamics in a changing ocean: Does life history influence the susceptibility of juvenile fishes to ocean
				acidification and hypoxia in nursery habitats?
				Spatial Redistribution of Fishing Effort: Identifying Drivers and Testing Model Predictions for Informing Expectations
				in Marine Spatial Planning
				Statewide high-resolution assessment of California coastal cliff erosion and retreat The environmental and economic impacts of moorage marinas in the West Coast
				Sea Grant Climate Adaptation Capacity Building Initiative
CA	USC Sea Grant	\$567,944	\$226,207	Levelation Faturaine Boomers To Faturas France Otenso And FINES As Indicators Of Fatura Conditions In Links
				Low Inflow Estuarine Response To Extreme Events: Storms And El Niño As Indicators Of Future Conditions In Urban Southern California Estuaries
				Developing A Dialog/Decision-Support Tool For Climate-Smart Restoration And Adaptive Strategies In Coastal
				Wetlands Of Southern California
				Cleaning Urban Stormwater On Its Way To The Ocean: Ecosystem Services From Natural Treatment Systems Mobile Beach Erosion Monitoring (Moberm)
				Understanding Fish Habitat Utilization In A Tidally Restricted Urban Lagoon System
				Quantifying Rocky Headland Water and Sediment Transport with Coastal Management Implications
				Coastal Community Development Program
				Climate Adaptation Planning Program Development
				The environmental and economic impacts of moorage marinas in the West Coast
				Developing a Model Ordinance for California Local Governments to Integrate Sea-Level Rise Adaptation into Existing
				Land Use Plans Marine Extension and Education
				Graduate Student Trainee
СТ	Connecticut Sea Grant	\$339,107	\$118,411	
				Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability, Resilience and Informed Decision Making (North East Regional Competition)
				Modeling Alternative Management for Sustainable Stocks of Tautog
				Coastal Wetlands at the Leading Edge of Sea Level Rise: Effects of Urban Wetland Restoration on Ecosystem
				Function Modeling Vibrio parahaemolyticus Outbreaks in Commercial Shellfish Areas in Western Long Island Sound:
				Research Linking Local Environmental Factors and Uptake by Oysters
				Coastal Wetlands at the Leading Edge of Sea Level Rise: Effects of Urban Wetland Restoration on Ecosystem
				Function Connecticut Sea Grant Extension
				Coastal Hazards and Northeast Housing Values: Comparative Implications for Climate Change Adaptation and
				Community Resilience
				Buy out or Build Back? A Comparative Assessment of Approaches to Employing Public Funding to Vulnerable Coastal Properties in the Northeastern United States
DE	Delaware Sea Grant	\$708,237	\$187,283	Code Carrier Control C
				Delaware Sea Grant Graduate Education
				Optical Observing Systems for Delaware's Coastal Research and Management Monitoring natural and man-made sounds in and around the Delaware Bay
				Social Dimensions of Offshore Wind Power Development off the Delmarva Peninsula
				Extending models of surface hydrodynamics in complex natural and modified tidal marsh environments
				A bioeconomic analysis of ecosystem-based horseshoe crab fishery management Bioremediation of Wastewater and Industrial Emissions by Heterosigma akashiwo for the Production of Biofuels at
				Commercially Relevant Scales
				Development of a High Water Mark Database and Display System for Coastal Flooding Events in Delaware
				Delaware Sea Grant Advisory Service Climate Extension
				Coastal Community Development
	—			Delaware Sea Grant Program Development
FL	Florida Sea Grant	\$647,572	\$318,505	Coupling Risk and Resilience Assessment for Networked Sustainable Drainage Systems in a Coastal City under Climate Impact
				A Rapid Forecasting System for Storm Surge and Coastal Inundation Including Effects of Sea Level Rise
				Promoting Preventive Mitigation of Buildings Against Hurricane through Enhanced Risk-Assessment and
 				Decision-Making AOML/Sea Grant Gulf of Mexico and SE Region Project
				State and Local Policy Innovation and Implementation for Coastal Communities
				Assisting Coastal Communities Plan and Manage Their Working Waterfronts and Waterways: The Boating and
				Waterway Planning Program The effects of projected sea level rice on Everglades coastal acceptations: Evaluating the potential for and
				The effects of projected sea-level rise on Everglades coastal ecosystems: Evaluating the potential for and mechanisms of peat collapse using integrated mesocosm and field manipulations
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		Ī		A Quantitative Framework to Evaluate Vessel Collision Risk for Marine Mammals in Florida
				Florida Sea Grant College Extension Program
GA	Georgia Sea Grant	\$521,454	\$248,521	Adding dynamic information to resiliency planning: wetland mitigation and open space opportunities. Creating a model system for sustainable development: striking a balance between the ecological, economic and social needs of Jekyll Island State Park.
				Increased tidal flooding in coastal Georgia: assessing the barriers and value of acquiring and relocating property. Community Planning for Sea Level Rise, Flooding and Storm Surge
				Planning for Competitive Port Expansion on the U.S. Eastern Seaboard: The Case of the Savannah Harbor
				Expansion Project (SHEP).
				Coastal Georgia Regional Wastewater Planning
				Marine Advisory Services Georgia Coastal Research Council
				Coastal Sustainable Communities
				Communications
GU	Guam Sea Grant	\$30,000	\$31,190	Program Development
GU	Guain Sea Grant	\$30,000	ψ31,190	UOGSG Communications
				Pago BayComunity Baed Conservation Program
Ш	University of Howeii See Crent	¢4 502 050	¢075 507	Increasing Climate Change Awareness on Guam
HI	University of Hawaii Sea Grant	\$1,583,058	\$875,597	Engineering Feasibility Study of a Water Catchment System for Moku o Loe (Coconut Island), Hawai'i Institute of
				Marine Biology, Kaneohe, HI USA
				Ocean Acidification Monitoring Network, Oahu, Hawaii
				Groundwater Inundation: Doubling Community Damage from Sea Level Rise Humankind's Biogeochemical Experiment: Ocean Acidification and "Coral Reef" Dissolution
				Forecasting climate change impacts on coastal ecosystem services in Hawaii through integration of ecological and social participatory models
				Global and regional vulnerability to 21st century climate shifts in current areas of plant growth
				Coral adaptation and acclimatization to global change: resilience to hotter, more acidic oceans Groundwater-derived nutrient uptake in coastal ecosystems as driver of reef accretion-erosion balance
				Quantifying transport and differentiation of land-use impacts of groundwater nutrient loadings to the coastal zones of Maui
				Disease Outbreak Investigation on the Reefs of Kauai
				The effects of anthropogenic noise on humpback whale mother-calf pairs
				Maintaining healthy coastal ecosystems: understanding disease risk of Hawaii's coral reefs and sources of coral pathogens
				Sea Grant Extension Program
				Communications Program
				Graduate Trainee Program Program Development
IL/IN	Illinois-Indiana Sea Grant	\$709,325	\$340,375	1 Togram Development
				Drivers of microbial food web structure and function: Bottom-up and topdown controls across Lake Michigan Impact of taxonomic and genetic diversity on dissolved organic carbon uptake by bacterial communities Social Science Research: Evaluating the Maintenance and Diffusion of Best Management Practices in the Salt Creek Watershed
				Social Science Research: Mapping Vulnerability in EPA-designated Areas of Concern
				Program Development: Climate Change Outreach: Climate Adaptation
				Outreach: Environmental Planning
				Outreach: Community Sustainability
				Outreach: Water Resource Economics
				Outreach Program: Program Management Communication
				Education: Great Lakes Commission
				Program Development
1 ^	Laudaama Caa Currit	#400.004	COEC 400	Research Program: Administration
LA	Louisana Sea Grant	\$468,021	\$256,496	Forecasting Land Building and Hurricane Flood Risk Reduction by River Diversion in Mississippi River Delta Local Governments to be Financially Resilient to Natural Disasters
				Climate Education and Extension
				Sea Grant Extension Legal Advisory Service (LAS)
				Publications and Information Dissemination
				Advisory Services in Sustainable Communities and Economies
MA	MIT and Woods Hole Sea Grant MIT Sea Grant	\$497,235 \$240,799	\$238,639 \$123,455	Buy Out or Build Back? A Comparative Assessment of Approaches to Employing Public Funding to Vulnerable
				Coastal Properties in the Northeastern United States
				Coastal Hazards and Northeast Housing Values: Comparative Implications for Climate Change Adaptation and
				Community Resilience
				Climate Change Adaptation Initiative: Participatory hazard mitigation using the Vulnerability and Consequence Adaptive Planning Scenario (VCAPS) process
				Using a Global-Regional-Coastal FVCOM System to Assess the Impact of Sea Level Rise on Hurricane and
				Nor'easter-induced Flood Risk over Massachusetts Coast
				Consortium for Ocean Sensing In the Nearshore Environment (COSINE)
				Marine Social Sciences Interdisciplinary Science Outreach
				Coastal Community Development
				Coastal Resources Focus Area
				Sea Grant Project Development Opportunities
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	Woods Hole Sea Grant	\$256,436	\$115,184	
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				Resilience and Informed Decision Making) Outreach: Future Flood Losses due to Sea Level Rise
				A History of Mercury Impacts to Waquoit Bay Clams
				Beyond Fish Passage: Variability in Nursery Habitat and Its Influence on the Feeding, Growth and Survival of the
				Early Life Stages of River Herring Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability,
				Resilience and Informed Decision Making)
				Marine Extension Program
MD	Maryland Sea Grant	\$179,000	\$80,114	Riparian Indicators of Eco-Hydraulic Function for Improved Watershed Management and Monitoring
				Maryland Sea Grant Coastal Resilience Competitive Research Fellowships
				Understanding the Effectiveness of the Watershed Stewards Academies in Maryland
				Extension Climate Change Program Maryland Sea Grant Research Fellows Program
ME	Maine Sea Grant	\$492,437	\$170,365	Inaryland Sea Grant Research Fellows Frogram
				Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability,
				Resilience and Informed Decision Making
				Revisiting Age Determination in the American Lobster: Validating Growth Estimates in Contrasting Thermal Regimes
				Coastal Flooding and Erosion from Severe Storms in a Changing Climate
				Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability,
				Resilience and Informed Decision Making (North East Regional Competition) Dual Degree Masters Students at UM School of Marine Sciences
				Climate Change Adaptation
				Marine Extension and Education
				Coastal Community Development Maine Sea Grant Communications
				Sea Grant Program Development Funds
MI	Michigan Sea Grant	\$471,161	\$254,982	Hoing on Ingegrated Aggregated Aggregate address the Containability of Containabilit
				Using an Ingegrated Assessment Process to address the Sustainability of Small Harbors Development of Stable Open Channel Design Criteria
				Where People Meet the Muck: An Integrated Assessment of Beach Muck and Public Perception at the Bay City State
				Recreation Area, Saginaw Bay, Lake Huron
				Sea Grant/GLERL Great Lakes Sea Grant Network Agent Extension
				Climate Adaption
		•	•	Coastal Community Development
MN	Minnesota Sea Grant	\$607,146	\$244,136	Building Climate Readiness in Nature-Based Tourism-Dependent Coastal Communities
				Intergrative social and hydrologic models for enhanced resiliency of coastal communities under extrme weather
				events
				Factor Contributing to Community Resilience in Extreme Climatic Conditions Coastal Communities
				Extension
				Communication
				Climate Research Assistanships
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MS/AL	Mississippi-Alabama Sea Grant	\$287,575	\$154,238	
				Assessing Past, Present and Future Drought and Floods in Coastal Mississippi and Alabama. Linking Community Rating System Activities to Economic and Environmental Characteristics: Toward a measure of
				Flood Resilience.
				Mississippi-Alabama Sea Grant Outreach Program (Alabama Extension, Mississippi Extension, Legal and
				Communications Components).
				Enhancing Mississippi-Alabama Sea Grant Outreach to Address Community Climate Adaptation Needs in Mississippi and Alabama.
				Program Development.
NC	North Carolina Sea Grant	\$597,778	\$441,460	
				Fellowship or post-doc opportunity on community resilience research Studying stormwater runoff to better protect public health at North Carolina beaches
				Strengthening the Hurricane Wave and Surge Forecast Guidance provided to Coastal Communities in North Carolina
				Development of Tourism Trails to Benefit Rural Coastal Economies and to Preserve National Resources and Coastal Heritage
				Labor Implications of Sustainable Coastal Development: Relations between Coastal and Inland Communities
				Coastal Communities
				Climate
				Extension Communications
NH	New Hampshire Sea Grant	\$321,433	\$126,228	
				Climate Adaptation for Road Infrastructure in Coastal New Hampshire Identification of Endemic Lineages of Vibrio parahaemolyticus Causing Regional Outbreaks and their Occurrence in
				New Hampshire Shellfish Waters
				Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability,
				Resilience and Informed Decision Making (North East Regional Competition)
			Ī	Social and Ecological Factors Influencing Shoreline Hardening in the Northeast:
				Implications for Vulnerability Resilience and Informed Decision Making
				Implications for Vulnerability, Resilience and Informed Decision Making Climate adaptation for road construction in coastal New Hampshire
				Climate adaptation for road construction in coastal New Hampshire Identification of endemic lineages of Vibrio parahaemolyticus causing regional outbreaks and their occurrences in
				Climate adaptation for road construction in coastal New Hampshire

				Climate Adaptation
				Coastal Communities
				Communications and Information Program Program Development
				Coastal Hazards and Northeast Housing Values: Comparative implications for climate change adaptation and
				community resilience
				Buy Out or Build Back? A comparative assessment of approaches to employing public funding to vulnerable coastal
				properties in the Northeastern United States
				Analysis and Communications of Flood Damage Cost Avoidance in the Lamprey River Watershed of New Hampshire
NJ	New Jersey Sea Grant	\$567,776	\$333,281	
110	Now delect dea drain	φοσι,τιο	ψοσο,2οι	Advancing Eastern Oyster Aquaculture through Marker-assisted Selection (Supplement)
				Facilitating Natural Dune Building
				Genetic monitoring to improve fish stock assessments
				A Green Technology for Nutrient and Metals Reduction in NJ Coastal Waters
				Development of Climate Change Adaptation Element for Municipal Land Use Plan
				Enhancing the Effectiveness of Decision Support Tools for Coastal Resilience Facilitating Natural Dune Building
				Development of historically-calibrated sea level rise projections for risk management along the New Jersey Shore
				Water Resources
				Coastal Processes
				Climate Extension
				Communications
ND	N V 10 0 1	*****	* 450 700	Extension Core
NY	New York Sea Grant	\$863,870	\$458,762	Loveraging Long Joland's Coastal Haritage for the Future: Integration and Diversification of Long Joland's Coastal
				Leveraging Long Island's Coastal Heritage for the Future: Integration and Diversification of Long Island's Coastal Industries
				Coupling Biophysical Observations and Economic Impacts of Harmful Algal Blooms in Sodus Bay, Lake Ontario
				The role of submarine groundwater discharge (SGD) in promoting hypoxia in Smithtown Bay
				Coastal hazards and northeast housing values: Comparative implications for climate change adaptation and
				community resilience
				Buy out or build back? A comparative assessment of approaches to employing public funding to vulnerable coastal
				properties in the northeastern United States
				Extension Program Coastal Community Development Program
				Climate Change Capacity Building Initiative
				Communications
				Program Development
OH	Ohio Sea Grant	\$379,305	\$197,797	
				Developing superior neomale broostocks and genetically fast-growing monosex female populations in yellow perch
				and evaluating their growth and production potential at different culture regions
				Understanding dam removal impacts on a formerly prolific Great Lake's walleye population
				The role of nitrogen concentration in regulating cyanobacterial bloom toxicity in a eutrophic lake Delivery of sediment amendments using far-field ultrasound
				Should nitrogen be managed Lake Erie? The potential role of nitrogen fixation by cyanobacteria.
				Impacts of Climate Change on Public Health in the Great Lakes due to Harmful Algae Blooms
				Beneficial reuse of dredged material in manufactured soil blending: Economic/logistical and performance
				considerations
				Linking Agricultural Production and Great Lakes Ecosystem Services: Modeling and Valuing the Impacts of Harmful
				Algal Blooms in Lake Erie
				Mapping drain tile and modeling agricultural contribution to nonpoint source pollution in the western Lake Erie basin
				Extension
				Communications
				Program Development
OR	Oregon Sea Grant	\$207,138	\$110,377	
				Keeping Local Economies Safe: the Role of Economic Development Plans in Natural Hazards Resilience
				Preparing for Climate Change in Oregon Estuaries: Flooding, Ecological Impacts, and an Integrated Approach
 				Toward Adaptive Management Community Engagement about Reciliance to Climate Change in the Context of Coastal Ricks
\vdash				Community Engagement about Resilience to Climate Change in the Context of Coastal Risks Graduate Student Opportunities in Resilience and Adaptation Research
PA	Pennsylvania Sea Grant	\$487,952	\$222,460	Stadded Stadent Opportunition in recombined and Adaptation resould
' '	yana boa brain	Ţ.U.,UUZ	ţ, .55	Assessment of the Spatial Distribution of Brownfield Sites in Chester, PA at Risk of Flooding and Release of Pllutants
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				to the Delaware River
				Barrier Assessment of Lake ErieTributaries of Pennsylvania
				Barrier Assessment of Lake ErieTributaries of Pennsylvania Characterization of Nearshore Bathymetry and Longshore Current Velocity in Relation to estimating the potential for
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				Barrier Assessment of Lake ErieTributaries of Pennsylvania Characterization of Nearshore Bathymetry and Longshore Current Velocity in Relation to estimating the potential for nearshore transport of sediment and bacteria loads from walnut creek to presque isle state park beaches, erie Pennsylvania Decipering the Role of the Largemouth Bass Virus (LMBV in causing the observed mortalities in Juvenile Smallmouth Bass, micopterus dolomieu in the Susquehanna River Basin, Pennsylvania Monitoring a Freshwater Tidal Wetland in the Delaware Estuary: Flooding Influence on Accretion and a Potential for Priority Planning under Vulnerability to Sea Level Rise investigating the role of contaminants an dparasite prevalence in the observed mortality of smallmouth bass in the susquehanna river basin.
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				Barrier Assessment of Lake ErieTributaries of Pennsylvania Characterization of Nearshore Bathymetry and Longshore Current Velocity in Relation to estimating the potential for nearshore transport of sediment and bacteria loads from walnut creek to presque isle state park beaches, erie Pennsylvania Decipering the Role of the Largemouth Bass Virus (LMBV in causing the observed mortalities in Juvenile Smallmouth Bass, micopterus dolomieu in the Susquehanna River Basin, Pennsylvania Monitoring a Freshwater Tidal Wetland in the Delaware Estuary: Flooding Influence on Accretion and a Potential for Priority Planning under Vulnerability to Sea Level Rise investigating the role of contaminants an dparasite prevalence in the observed mortality of smallmouth bass in the susquehanna river basin. Rusty Crayfish and Smallmouth Bassin the Susquehanna River: Who"s eating Whom? Didymosphenia Geminata in Pennsylvania an indvestigation fo current and historic distribution, habitat suitability and Nutritional content. Extension Communications Program Development

PR	Puerto Rico Sea Grant	\$501,116	\$403,155	
	r delle rice dea Grant	ΨΟΟΊ,ΤΙΟ	ψ400,100	Hyperspectral Remote Sensing of Water Quality Parameters Impacting Coral Reef Health and Resilience in Puerto Rico
				Building a multi-institutional effort to understand regional connectivity: Linking fish, essential habitats and ecosystems for effective marine resource management
				Ecosystem-level impacts of community-based coral reef health rehabilitation in light of rapidly evolving ecological paradigms
				Facing the sea: Documenting the history of coastal interactions in Puerto Rico Towards Potential Beach Nourishment in Rincon: Seamless RTK Surveying, Sediment Compatibility Analysis and an Online Tool for Data Sharing
				Exposure and Adaptive Capacity to Floods: A ComprehensiveVulnerability Assessment of Rincon's Neighborhoods
				Life Cycle Cost Analysis of Beach Restoration: Rincón, PR Test bed Marine Outreach Program
				Virgin Islands Marine Advisory Service Coastal Communities Development
				Communications and Publications
				Program Development Connectivity between shallow and mesophotic ecosystems in Puerto Rico and the US Virgin Islands: using corals and commensal fauna
RI	Rhode Island Sea Grant	\$267,791	\$92,154	Climate Extension
	Timodo Iolania Osa Orania	Q201,1101	ψ02,101	Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability, Resilience and Informed Decision Making (North East Regional Competition) Sustainable oyster aquaculture: balancing ecosystem services and impacts in Rhode Island coastal lagoons. Extension Extension - Coastal Community Development Extension - Climate Adaptation Legal Program
SC	South Carolina Sea Grant	\$606,135	\$248,659	
				The Sea Grant Resiliency Research Graduate Student Fellowship Program: A S.C. Sea Grant Consortium Resiliency Initiative
				Integrating climate variability and coastal community adaptation in South Carolina Addressing the challenges of coastal growth in South Carolina: A SC Sea Grant Consortium initiative
				SC Sea Grant Extension South Carolina Sea Grant Consortium Program Planning and Development
				Wind and rain resistant design for coastal cross laminated timber buildings Evaluating the cause and effect after twenty years of assessing the impacts of coastal development on tidal creek
				headwaters
				Hydrology and pollutant removal performance in detention ponds typical of the lower coastal plain of South Carolina
				Evaluating wetland function in coastal South Carolina to support low impact development decision making Development and validation of a novel molecular tool to rapidly detect and quantify harmful algal bloom (HAB)
				species linked with fish kills and public health concerns Particle contamination: Direct effects on salt marsh-tidal creek organisms and indirect effects on the bioavailability and toxicity of polynuclear aromatic hydrocarbons (PAHs)
TX	Texas Sea Grant	\$718,114	\$323,032	
				Texas Sea Grant Scholars Economic Valuation of Brown and White Shrimps as Forage Species in the Coastal Areas of Texas
				Assessment of Population Genetic Differentiation of the Blue Crab (Callinectes sapidus) in the Gulf of Mexico using Next Generation Sequencing Technologies
				If we lose Folletts Island, we lose coastal communities and Christmas Bay: A geological framework and numerical model study of the sustainability of Folletts Island
				Identification of organic matter sources contributing to hypoxia formation in two eutrophic South Texas estuaries: relationships to watershed land use practices
				Evaluating Groundwater/Surface-Water Inflow and Nutrient Transport to Texas Coastal Embayments
				Sea Grant Extension Program Coastal Communities Development
				Mangroves are invading Texas salt marshes: what are the consequences? Texas Sea Grant's Climate Literacy and Capacity Building Program
VA	Virgina Sea Grant	\$555,823	\$304,771	
				Assessing the Impacts of Climate Change on the Sustainability of Proposed Restoration Activities in the Chesapeake Bay
				Understanding the impacts of climate change on the distribution, population connectivity, and fisheries for summer flounder (Paralichthys dentatus) in the Mid-Atlantic Bight (Virginia component) Assessing the Health Impacts of the Emerging Harmful Algal Bllow Species, Alexandrium monilatum.
				Barrier Island Responses to Hurrican Sandy's Impacts
				Jellyfish population dynamics in the Chesapeake Bay Preliminary investigation of the specific interactions between Vibrio spp. and zooplankton taxa in lower Chesapeake
				Bay Marine Extension Program Administration
				Virginia Seafood Agricultural Research and Extension Center and Virginia Sea Grant Seafood Extension Program
				Building a Resilient Coast: Extending Legal and Policy Services to Virginia's Coastal Communities Coastal Community Resilience & Adaptation: Scientific Synthesis, Integration & Outreach to Virginia's Coastal
				Communities Extension: Resilient Communities and Economies
				Communication Center Program Development
				Research Administration
VT	Lake Champlain Sea Grant	\$195,125	\$80,177	Climate Extension
				Coastal Communities
		1		Extension

WA	Washington Sea Grant	\$687,107	\$349,479	
				Marine Survival of Puget Sound Chinook Salmon: Size-selective Mortality, Critical Periods, and Growth Limitation
				Evaluating Puget Sound Marine Protected Areas to Increase Social Ecological Resilience
				Recovery of the native Olympia oyster, Ostrea lurida, in Northern Puget Sound: measuring the larval import to and
				export from a restored subpopulation
				Effects of Waterfront Stormwater Solution Prototypes on Water Quality Runoff in Penn Cove, Town of Coupeville.
				The environmental and economic impacts of moorage marinas on the West Coast
				Planning for Coastal Community Resilience to Tsunamis Using Transportation and Disaster Recovery Modeling
				The Biological Effectiveness of Bioretention for Stormwater Pollution Control
				Climate Adaptation Initative
WI	University of Wisconsin Sea Grant	\$377,740	\$311,407	
				Extreme Events, Watershed Loadings, and Climate Change: Implications for the Management and Long Term Health
				of the Green Bay, Lake Michigan Ecosystem
				A New Tool for Studying Food Web Change in the Great Lakes: Amino Acid-Specific Nitrogen Isotope Analysis
				Building Blocks of the Heartland: Underwater Archaeological Investigations of Wisconsin's Stone Industry
				Estimating the Economic Benefits of the Wisconsin Great Lakes Sport Fishery
				Development of Geo-Indicators for Assessment of Coastal Bluff Ecosystem in Lake Michigan for Regional Integrated
				Bluff Management (IBM)
				Algal Bioremediation of Wastewater Inputs to Great Lakes Ecosystems
				Advisory Services
				Communications
Total		\$15,964,374	\$7,945,776	